

## ABSTRACT

A pressure-operated regulating valve for controlling fluid pressure in a conduit. The valve comprises a flexible diaphragm dividing the interior volume of a housing into a control pressure chamber and an outlet chamber. A valve seat connects with the fluid conduit containing pressurized fluid. A disc poppet, which cooperates with the valve seat to control communication between the valve seat and the outlet chamber, is attached to the diaphragm. The valve seat is threaded into the housing so that the valve seat is movable perpendicular to the diaphragm. The diameter of the roll of the diaphragm changes when the valve seat is adjusted, making the effective area of the diaphragm selectively variable. The deadband, or the leakage of the valve can then be adjusted, making the valve useful in fluid measurement and metering systems.